## **Ballot Building**

#### Introduction

Correct and easily understood ballots are the foundation of a successful election. Building a ballot is part science and part art. The science is rather straightforward and will be presented in this chapter. The art is learned through experience.

A document such as this must be general in nature and cannot account for all of the differences in state and local election laws and regulations. You should seek, whenever possible, written clarification from the appropriate authority when implementing suggestions or recommendations contained in this chapter when a relevant law and/or regulation on point is ambiguous or inconsistent with that suggestion or recommendation, or its implementation.

This chapter is organized in five major sections. The first section discusses those issues that are common to all ballots. The next three sections discuss issues that are specific to touch screen ballots, optical scan ballots, and audio ballots. The final section addresses the testing and validation of the completed ballots.

#### **General Ballot Considerations**

**Schedule Considerations:** As you approach an election there are various time dependent events that have to occur. Some of these events are specified by law, such as the deadline for mailing absentee ballots, and others are dictated by necessity, such as the time it will take your printer to produce the printed ballots. Some events are dependent upon other events. For example, you cannot conduct Logic and Accuracy Tests until the printed ballots are available.

Your election supervisor will build and publish a schedule that contains all of the events leading up to the election. As a ballot builder you need to be very familiar with the dates on this schedule that affect the ballot building process.

Find out from your printer(s) the earliest and latest dates that they can accommodate receiving and printing your ballots. Note that the latest date must be sufficiently after the close of qualifying to allow you ample time to proof the finished ballots. Allow time to re-print any ballots that contain necessary revisions or errors. Be sure that these dates allow you to meet the requirements for public review and mailing absentee ballots.

Include in your schedule the dates that you will receive resolutions for federal and state contests and the opening and closing of qualifying for local, state, and federal offices.

Verify that the jurisdiction election database is up to date and update it if necessary. As soon as possible, you want to prepare the specific election database that contains everything except the names of the candidates and the specific wording of the questions and/or referendums. This

database will contain the type of election, all precincts, districts, races, number to vote for, and method of voting (at large, etc.).

**Jurisdiction Election Database:** Almost all of the currently available computer-based election management systems have a provision for building a jurisdiction election database. This data base can be built well in advance of any specific election. It contains all of the political districts in your jurisdiction (precincts, county commission districts, school board districts, state legislative districts, congressional districts, etc.) and all of the offices that may be elected (county commissioners, state senators, state representative, US representatives). Once this database is built it remains fairly static; however, it can change as a result of re-districting; adding, deleting, or changing precincts; legislation; or court cases and should be reviewed before each election.

**Specific Election Database:** To plan for a specific election, the districts and offices to be included in the election are selected from the jurisdiction election database to create an election database. This database will contain the precincts, districts, and races that will form the election. This information in turn defines the ballot styles that you need to prepare and which ballot styles are assigned to which precincts.

**Type fonts and sizes:** The Guidelines presented below give recommendations for type fonts and sizes. However, your state may have laws and/or regulations that govern type font and sizes. Follow your state laws and/or regulations if there is a discrepancy between the Guidelines and your state laws and/or regulations.

Chain of custody for ballots: In the context of ballot building, chain of custody is the device that demonstrates that progression and integrity of the ballot from its original creation to its final destination. This includes a document that reflects the precise chain in the transmission, receipt, custody, control, transfer and eventual distribution of the ballots from its originating point; and the parties responsible for each step in the chain. The chain of custody should begin when the ballot is designed and continue to the final disposition of the voted ballots. The chain of custody should cover the printing of the ballots at the printing facility, during transportation, in the office before mailing, and when received. When developing your chain of custody assume that you are going to have a court challenge and that you will have to prove that your ballots were constantly in the possession of an election official or a sworn officer and that there was absolutely no time when anyone could alter any ballot, either before it was cast or afterwards.

#### **General Considerations:**

When an instruction is based on a condition, state the condition first, and then the action to be performed. For instance, use "In order to change your vote, do X", rather than "Do X, in order to change your vote."

Use familiar, common words and avoid technical or specialized words that voters are not likely to understand. For instance, "... there are more contests and races on the other side ..." or "... vote both sides of the ballot ..." rather than "...additional contests are presented on the reverse ..."

Issue instructions on the correct way to perform actions, rather than telling voters what not to do. For example, "Fill in the oval for your write-in vote to count" rather than "If the oval is not marked, your write-in vote cannot be counted."

Address the voter directly rather than use passive voice constructions. For example, "remove and retain this ballot stub" rather than "this ballot stub must be removed and retained by the voter.

Avoid the use of gender-based pronouns. For example, "...write in your choice directly on the ballot..." rather than "... write in his name directly on the ballot..."

Consistent with election law, support a process that does not introduce bias for or against any of the contest choices to be presented to the voter. In both visual and aural formats, the choices *SHALL* be presented in an equivalent manner. Certain differences in presentation are mandated by state law, such as the order in which candidates are listed and provisions for voting for write-in candidates. However, comparable characteristics such as font size or voice volume and speed must be the same for all choices.

Whenever possible, do not visually present a single contest spread over two pages or two columns. Such a visual separation poses the risk that the voter may perceive one contest as two, or fail to see additional choices. If a contest has a large number of candidates, it may be infeasible to observe this guideline.

Clarly indicate the maximum number of candidates for which one can vote within a single contest.

The relationship between the name of a candidate and the mechanism used to vote for that candidate should be consistent throughout the ballot. For example, the response field where voters indicate their votes must not be located to the left of some candidates' names, and to the right of others'.

Display instructions near to where they are needed. For instance, only general instructions should be grouped at the beginning of the ballot; those pertaining to specific situations should be presented where and when needed.

#### **Touch Screen Ballots Considerations**

Provide clear and unambiguous instructions for navigating the ballot. Include instructions for any ancillary input devices such as 'sip-and-puff', paddles, etc. Provide the voter with clear and unambiguous instructions for completing the voting process and

casting the ballot. Use color to distinguish the instructions from the ballot content. If your touch screen voting station does not allow the voter to return to the instruction page, you should print these instructions and post them on the voting station in addition to providing the instructions on the touch screen.

If possible, keep all of the candidates for a given race in a single column on a single page. Avoid mixing races with a large number of candidates and races with a small number of candidates on a single screen. Whenever practical, limit each screen to a single race.

Recommendation: Do not use over three columns on a touch screen.

If your voting system produces a Voter Verifiable Paper Audit Trail (VVPAT) maintain a chain of custody for the VVPATs. The handling of this chain of custody has the potential to become the object of severe criticism from candidates and activists. Impress on your poll workers the importance of adhering to and documenting the VVPAT chain of custody.

## **Optical Scan Ballots Considerations**

General considerations for optical scan ballots: If possible, use a printer that has been certified by your voting system vendor. If this is not possible, be sure that the printer is able to meet your voting vendor's specifications. If you use multiple printers verify the consistency of the ballots among the printers. Require the printer(s) to send a 'test deck' of ballots to use to conduct logic and accuracy testing prior to all ballots being printed. If you hand mark your test deck you can use the printer supplied test deck to check the accuracy of your hand marked deck.

Have the ballots shrink wrapped in quantities small enough for you to verify the number of ballots in a pack (100 or less is recommended). If possible, review the ballots in all packets. Do not assume that because one (or several) packet of ballots is correct that all the other packets will also be correct.

If you prefer to send the ballots to the precincts in the original packaging, then review at least one packet of each ballot style.

When reviewing the ballots check for:

- Text relative to fold,
- Timing mark positions,
- Bleed through,
- Poor print quality,
- Ink density,

- Smudging,
- Paper opaqueness, and
- Verify that the folds do not interfere with the timing mark positions or the voting locations (ovals, arrows, etc.).

If the ballot is double sided, print clear instructions to the voter, on both sides of the ballot, to turn the ballot over. Print the words "**VOTE BOTH SIDES**" or a similar instruction at the bottom of both sides of the ballot.

If you use ballot-on-demand, it is advisable to test scan the ballot prior to issuing it to the voter. This is to insure that the paper was correctly aligned in the printer and that the scanner will recognize the timing marks. If scanning each ballot causes unacceptable delays, then, a'in s a minimum, each time you change the paper or add paper to the printer scan the first few ballots to be sure the paper is correctly aligned.

Important: Maintain and document a chain of custody for all blank ballots. Some election officials tell their staff to pretend that the ballots are five dollar bills and treat them accordingly.

# **Audio Ballot Considerations**

**General Considerations for audio ballots:** Do not begin to build your audio ballots until you have completed and verified your touch screen ballot.

For audio ballots it is important that each section of the ballot be in the same voice. For example, one voice can present the title and another voice can present the instructions. *However, all candidate names on the ballot must be in the same voice.* As stated in Guidelines section 3.2.4-D (see above), it is important for the volume and speed to be the same for all choices on the ballot. A recording of the candidates saying their names can be useful as a guide to pronouncing the name; however, this recording should not be used on the ballot. Some voting systems have a provision for using synthesized voices. Select between natural voices and synthesized voices based on the preference of your disabled community. If you use natural voices, consider using trained voices, such as actors, radio announcers, pastors, etc. If you live in a region of the country that has a strong local dialect prepare the audio in that dialect. You do not want Gomer Pyle preparing the audio for New York.

Recommendation: Use natural voices to the extent possible.

If you have to prepare the audio ballots in one or more languages other than English, make every effort to use persons for whom the language(s) are their first language. If possible, make the audio dialect neutral; however, if a language has more than one dialect, determine which dialect is used by a majority of your voters.

Translations from English to another language should maintain the spirit of the original text, particularly where literal translations are unavoidable or would not make sense.

## **Verifying the Ballot**

Every ballot style must be reviewed and verified against the official ballot certification documents for correctness in every format (touch screen, optical scan, and audio) and every language. This should be done before the ballots are sent to the printers for printing.

Verifying a ballot style requires that the ballot style is loaded onto a touch screen voting station and a copy of the optical scan ballot style is available for comparison. You can use the photo-ready copies of the ballot styles for this verification.

The persons who review and verify the ballots should not be the same persons that built the ballots.

Reminder: Remember the two person rule when verifying ballots.

One person should read the information from the official ballot certification document and the second person should verify that the information is *identical* on the touch screen, the optical scan ballot and the audio ballot. When testing the audio ballot, it is recommended that the ballot be played on a speaker so that both reviewers can hear and check the audio.

If possible, have a visually impaired person review the audio ballot. Also, if possible, have native language speakers review the alternate language audio ballots.